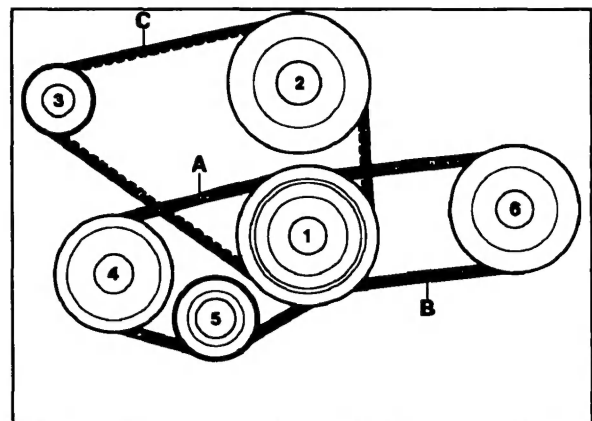


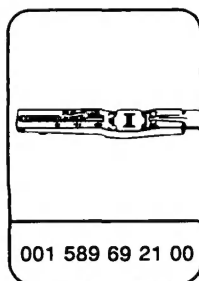
Engine 102  
with multiple belt drive

V-belt	Location	Tension (KG) New V-belt	Tension (KG) Used V-belt
A	Air conditioning compressor	50	40-45
B	Power steering pump	50	40-45
C	Generator--coolant pump	30	20-25

- 1 Crankshaft
- 2 Coolant pump
- 3 Generator
- 4 A/C compressor
- 5 Tensioning pulley
- 6 Power steering pump
- Belt A    A/C compressor
- Belt B    Power steering pump
- Belt C    Coolant pump - generator



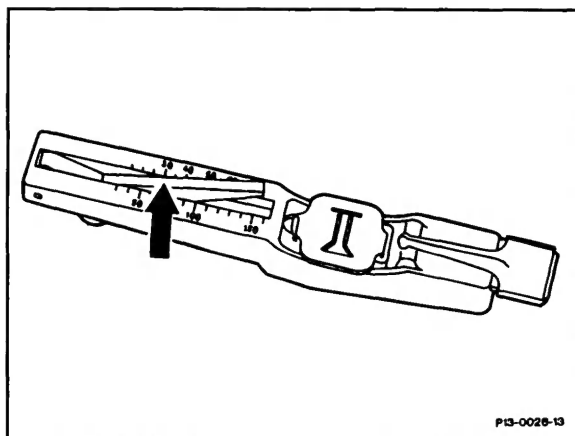
## Special tools



**Note**

Refer to operating instructions for use of measuring instrument.

The specified tensioning values refer to the KG scales on the instrument (arrow).

**Checking condition of V-belt**

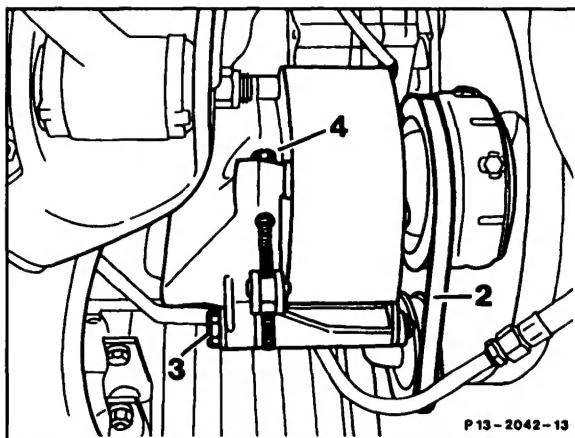
- Replace cracked or worn V-belts.

**Tensioning**

- Before tensioning, remove lower engine compartment panel.

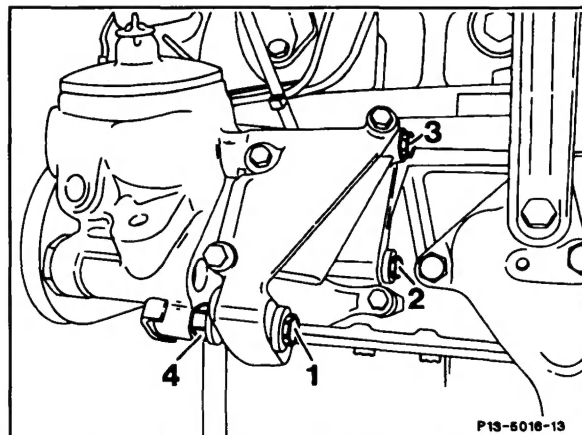
**V-belt A Air conditioning compressor**

- Loosen bolt (3).
- Tension V-belt with adjusting screw (4).
- Tighten bolt (3).



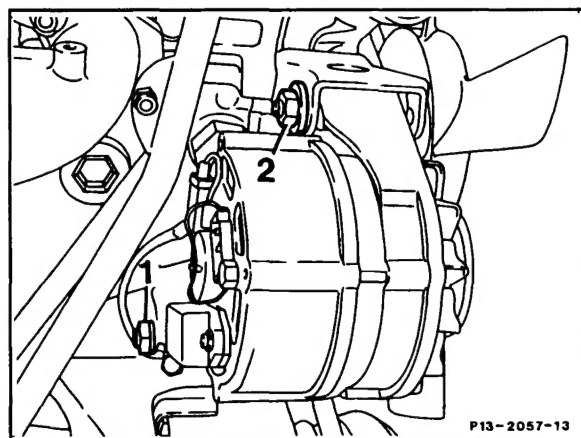
## V-belt B Power steering pump

- Loosen bolts (1, 2, and 3).
- Tension V-belt with adjustment gear (4).
- Tighten bolts (1, 2, and 3).

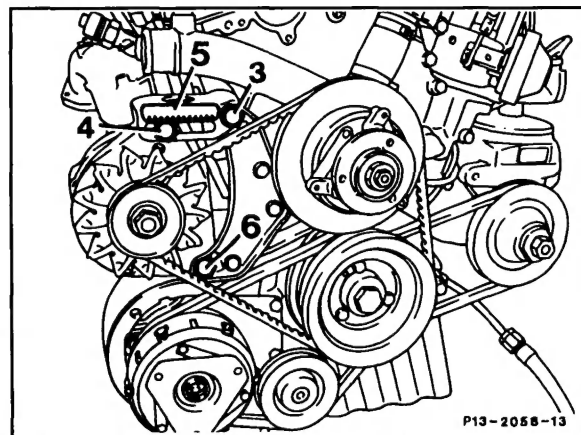


## V-belt C Generator--Coolant pump

- Loosen nuts (1 and 2) as well as bolt (3).



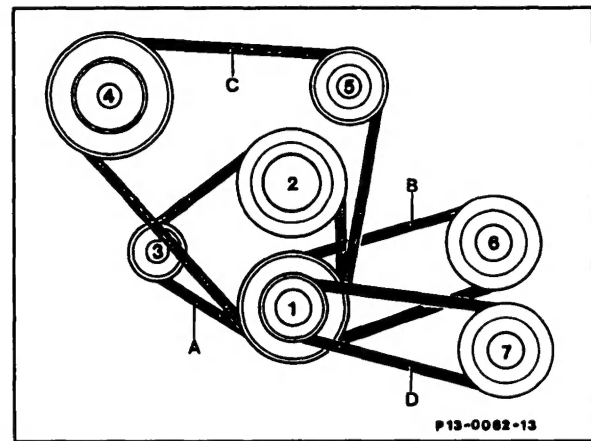
- Tension V-belt with adjusting screw (4).
- Tighten nuts (1 and 2), as well bolt (3).
- Install lower engine compartment panel.



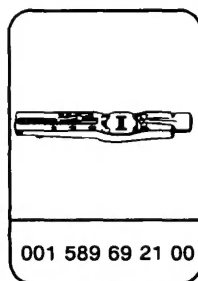
## Engine 110

V-belt	Location	Tension (KG) New V-belt	Tension (KG) Used V-belt
A	Generator--coolant pump	30	20-25
B	Power steering pump	50	40-45
C	Air conditioning compressor	50	40-45
D	Secondary air injection pump	30	20-25

- 1 Crankshaft
- 2 Coolant pump
- 3 Generator
- 4 A/C compressor
- 5 Tensioning pulley
- 6 Power steering pump
- 7 Secondary air injection pump



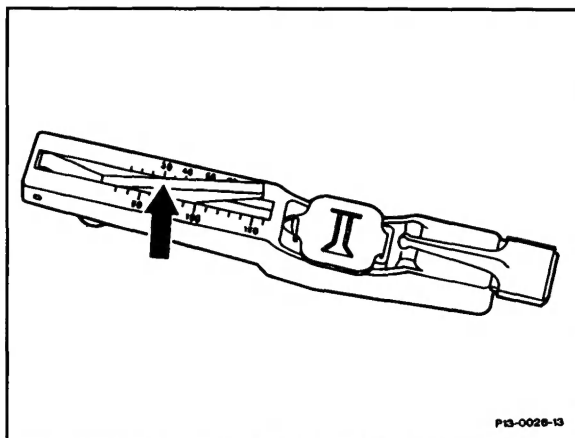
## Special tools



**Note**

Refer to operating instructions for use of measuring instrument.

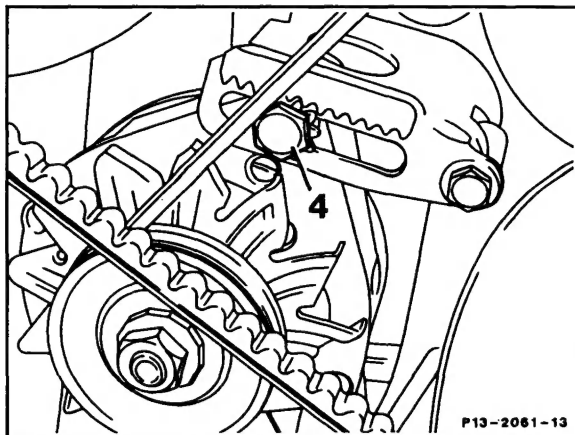
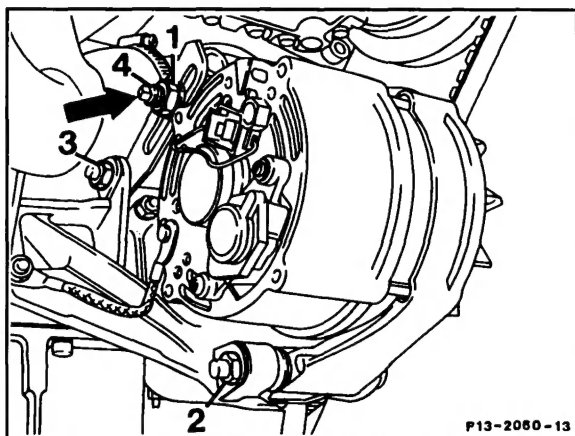
The specified tensioning values refer to the KG scales on the instrument (arrow).

**Checking condition of V-belt**

- Replace cracked or worn V-belts.

**Tensioning****V-belt A Generator-coolant pump**

- Loosen nuts (1, 2 and 3).
- Tension V-belt at hexagon or on engines with air conditioning compressor at 6 mm square of adjustment bolt (4).
- Tighten nuts (1, 2 and 3).

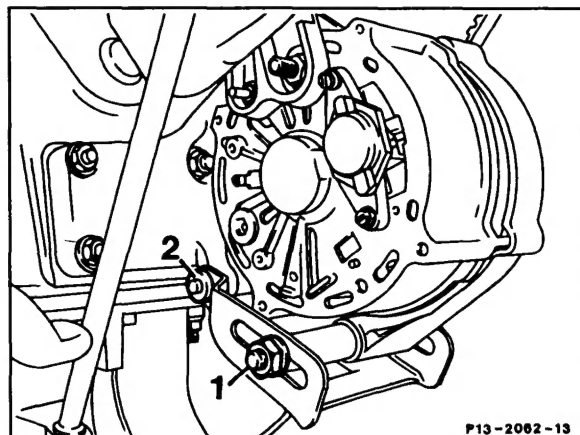


## V-belt A Generator 80 A-coolant pump

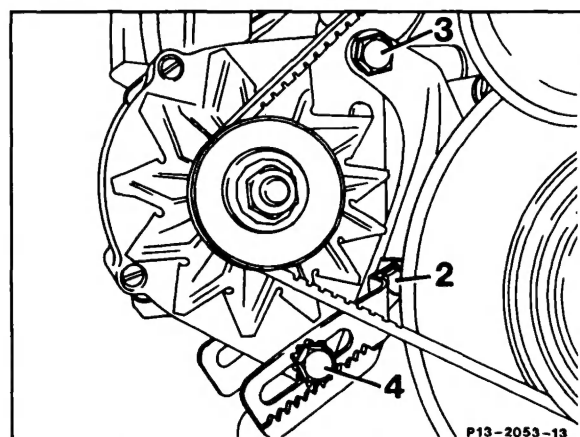
- Loosen nut (1).

### Note:

Bolt (2) is installed from the rear of the generator on vehicles built starting July 1984.

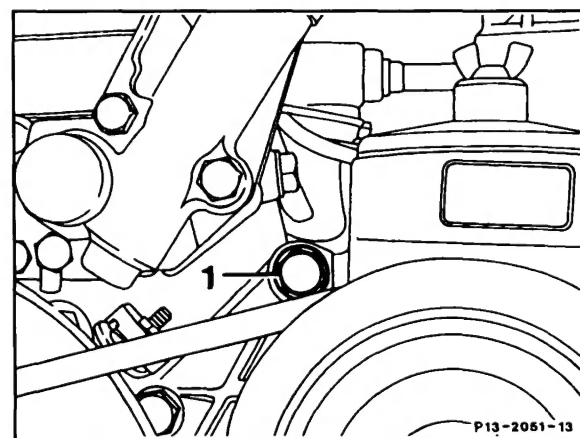


- On vehicle built up to July 1984, loosen bolt (2) from underneath the engine.
- On vehicle built starting July 1984, loosen bolt (2) from back of generator.
- Loosen bolt (3).
- Tension V-belt on hex of adjusting screw (4).
- Tighten nut (1) and bolt (3).
- Tighten bolt (2).

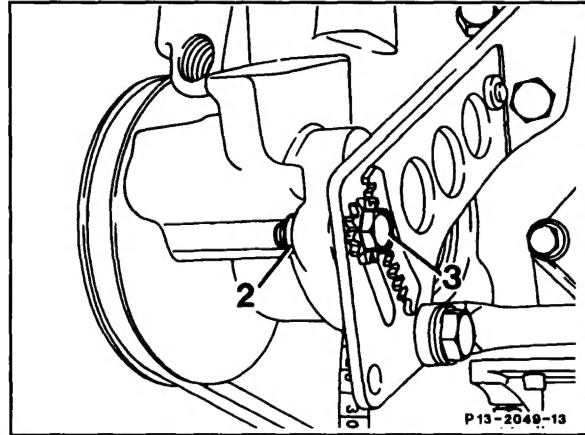


## V-belt B Power steering pump

- Loosen bolt (1) on face of power steering pump.

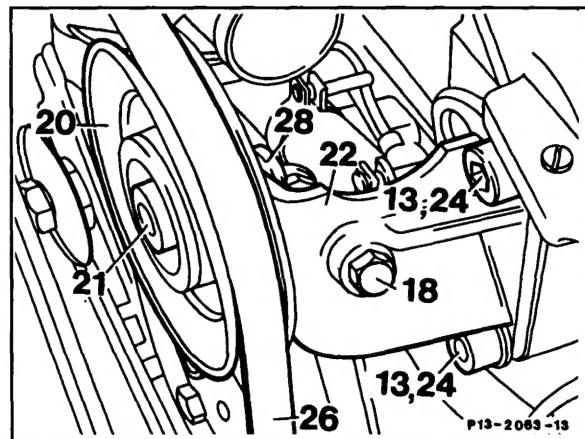


- Loosen nut (2).
- Adjust V-belt with adjustment bolt (3).
- Tighten nut (2) and bolt (1).



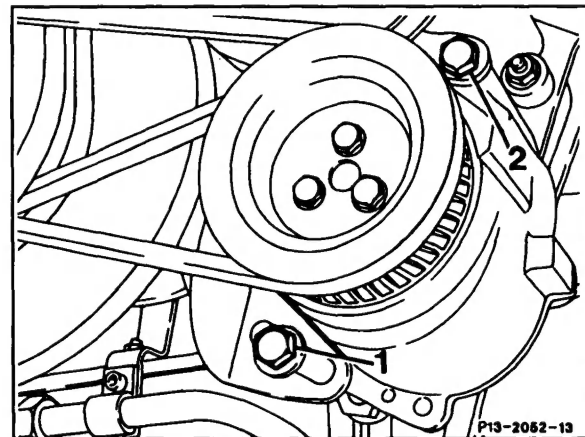
### V-belt C Air conditioning compressor

- Loosen necked down bolt (21).
- Adjust V-belt with adjusting bolt (18).
- Tighten necked down bolt (21) to 25 Nm.



### V-belt D Secondary air Injection pump

- Loosen mounting bolts (1 and 2).
- Adjust V-belt by swiveling secondary air injection pump outward.
- Tighten fastening bolts (1 and 2).

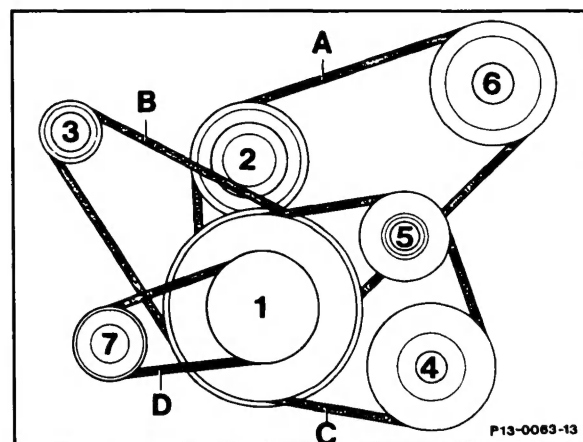


Engine 116 117

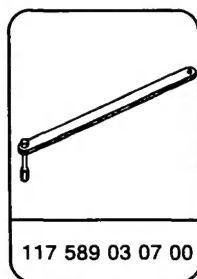
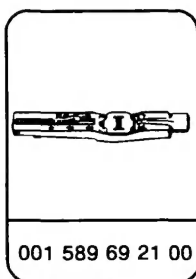
V-belt	Location	Tension (KG) New V-belt	Tension (KG) Used V-belt
A	Coolant pump - power steering pump <sup>1)</sup>	30	20-25
B	Generator	35	30-35
C	Air conditioning compressor	50	40-45
D	Secondary air injection pump	30	20-25

1) Double V-belt

- 1 Crankshaft
- 2 Coolant pump
- 3 Generator
- 4 A/C compressor
- 5 Tensioning pulley
- 6 Power steering pump
- 7 Secondary air injection pump



## Special tools





**Note**

Refer to operating instructions for handling of measuring instrument.

The specified tensioning values refer to KG scale of measuring instrument (arrow).

**Checking condition of V-belts**

Replace cracked, scorched or worn V-belts.

**Note:** If one of the two V-belts of the double belt drive has to be replaced due to wear, both V-belts must always be replaced.

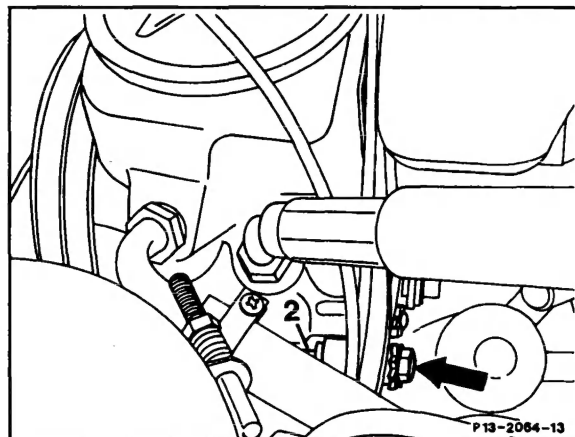
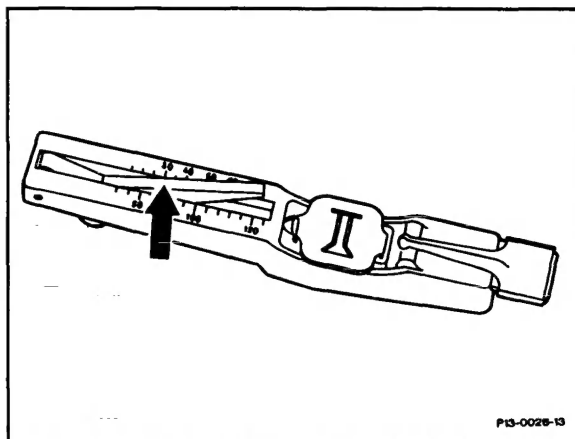
Only belts from one manufacturer may be installed together.

V-belts are supplied only in sets as spare parts.

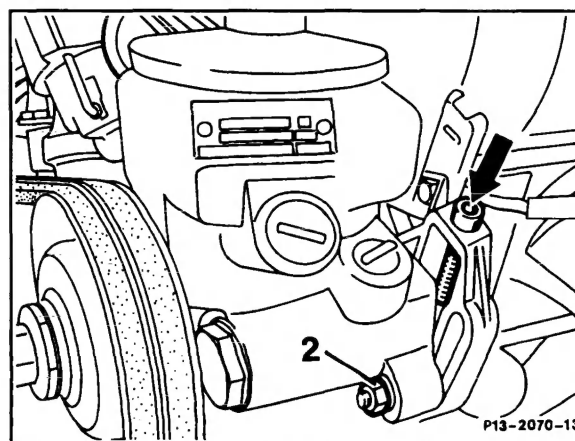
**Adjusting****V-belt A Coolant pump - Power steering pump**

Loosen nuts (1,2 and 3 [fulcrum]).

Adjust V-belt with adjustment screw (arrow).

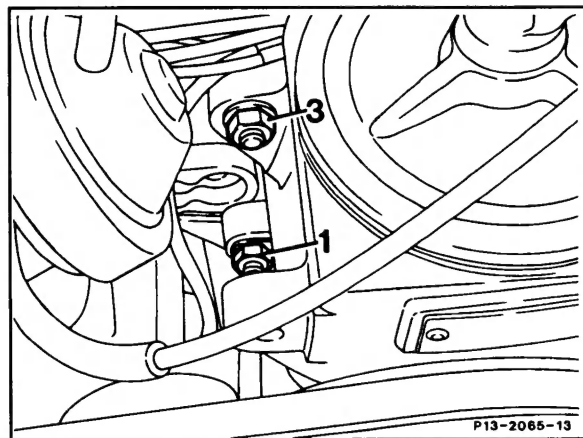


Power steering pump carrier (1st version)



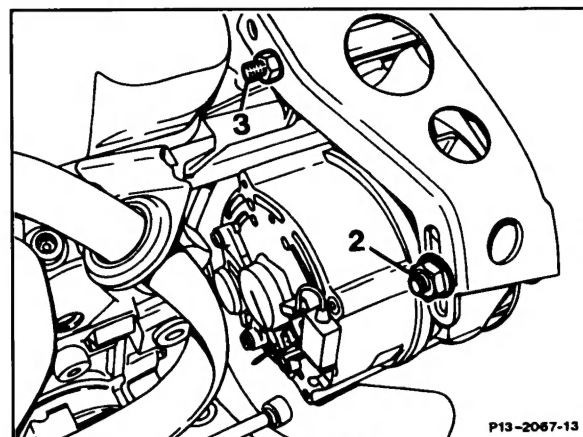
Power steering pump carrier (2nd version)

- Tighten nuts (1, 2 and 3).

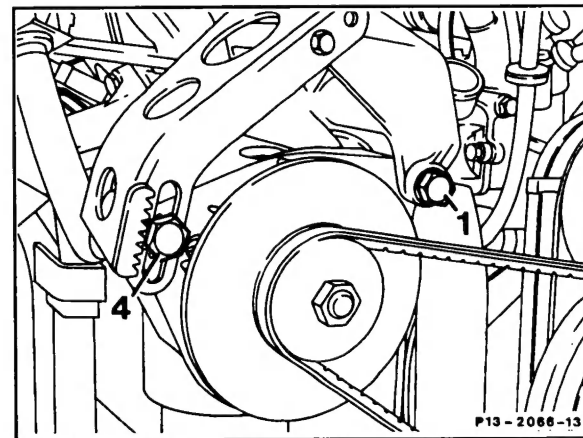


## V-belt B Generator

- Loosen fastening bolt (1) and nuts (2 and 3).



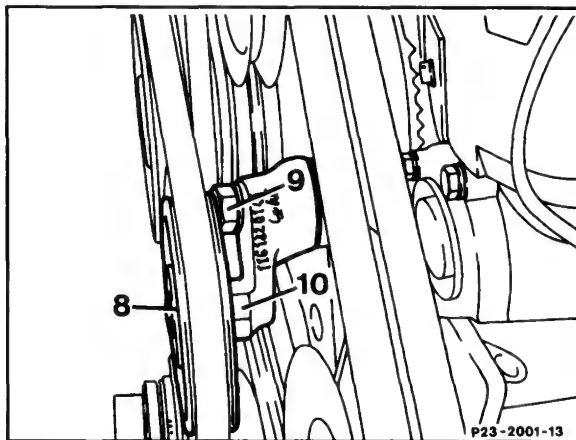
- Adjust V-belt with adjustment bolt (4).
- Tighten fastening bolt (1) and nuts (2 and 3).



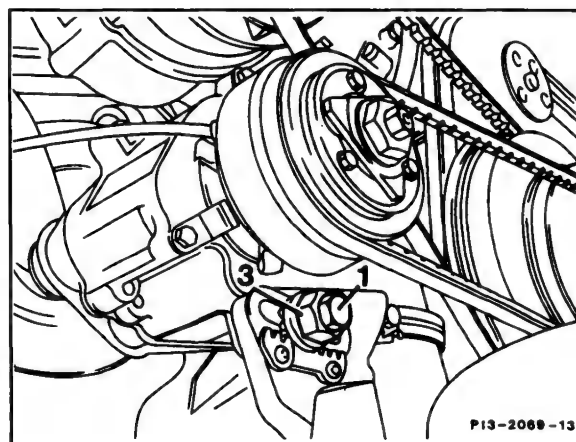
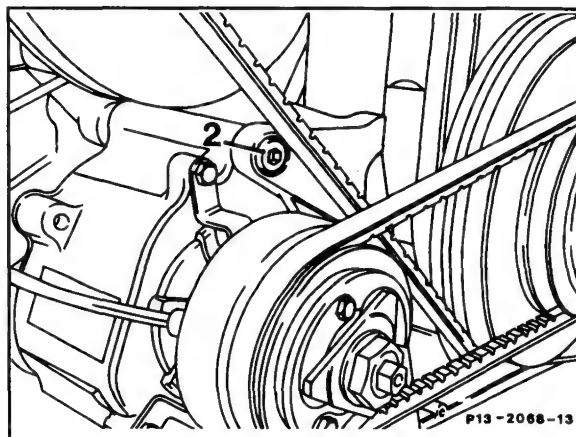
**V-belt C Air conditioning compressor**

- Loosen fastening bolt (9).
- Adjust the V-belt by turning the tensioning pulley (8). To do this place a right angle open end wrench (22 mm) on the flat surface (10).
- Tighten fastening bolt (9).

**Note:** As of November 1985 the mounting screw (9) is designed as a hex. socket screw. Use special tool 117 589 03 07 00.

**V-belt D Secondary air injection pump**

- Loosen fastening bolts (1 and 2).
- Adjust V-belt with adjustment wheel (3).
- Tighten fastening bolts (1 and 2).

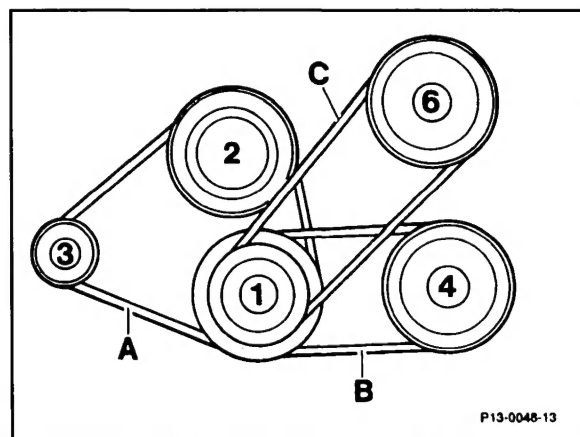


## Engine 616 617

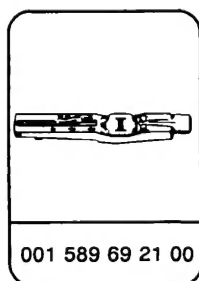
Engine		616, 617.91	617.95	616, 617.91	617.95
V-belt	Location	Tension (KG) New V-belt	Tension (KG) New V-belt	Tension (KG) Used V-belt	Tension (KG) Used V-belt
A	Generator - coolant pump	50	30 <sup>1)</sup>	40-45	20-25 <sup>1)</sup>
B	Air conditioning compressor	50	50	40-45	40-45
C	Power steering pump	50	50	40-45	40-45

1) Double V-belt

- 1 Crankshaft
- 2 Coolant pump
- 3 Generator
- 4 A/C compressor
- 6 Power steering pump



## Special tools



**Note:**

Refer to operating instructions for handling of measuring instrument.

The special tension data refer to KG scale of the measuring instrument (arrow).

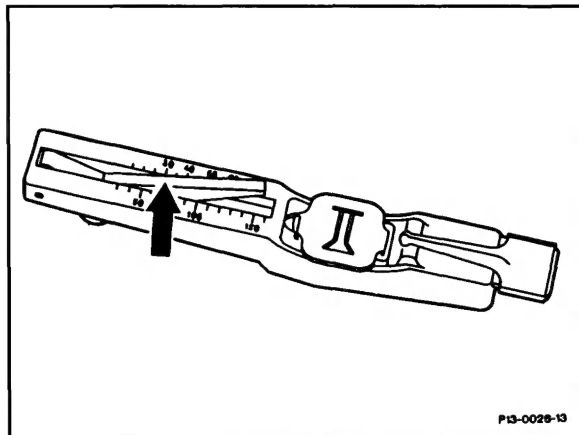
**Checking condition of V-belt**

Replace cracked, scorched or worn V-belts.

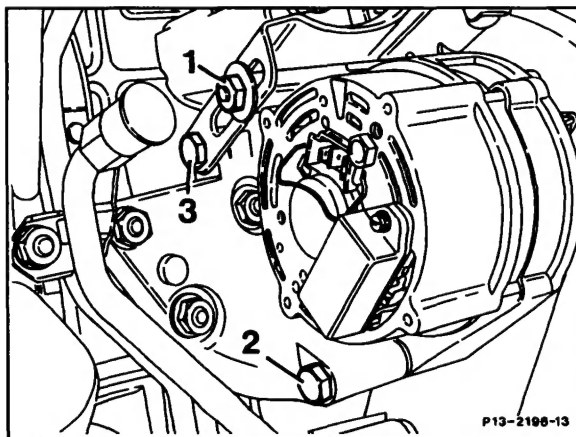
**Note:** If one of the two V-belts of the double belt drive (engine 617.95) has to be replaced due to wear, both V-belts must be replaced.

Only belts from one manufacturer may be installed together.

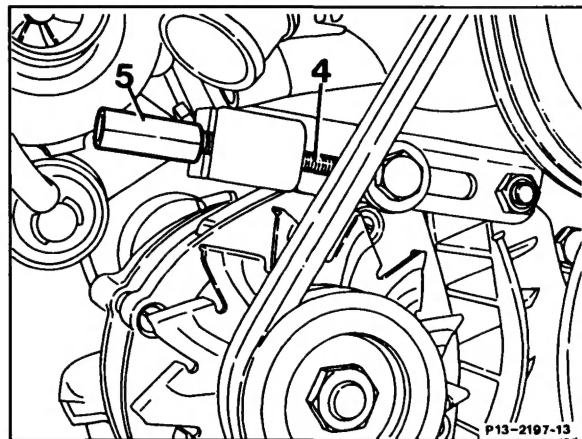
V-belts are supplied only in sets as spare parts.

**Adjusting****V-belt A Generator - Coolant pump**

- Loosen nut (1) and bolts (2 and 3).

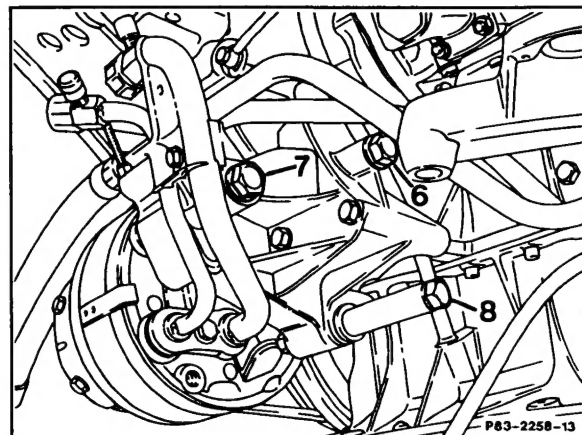


- Adjust V-belt with nut (5).
- Tighten nut (1) and bolts (2 and 3).
- Then keep turning nut (5) for approx. 1/4 to 1/2 turn (until tight).

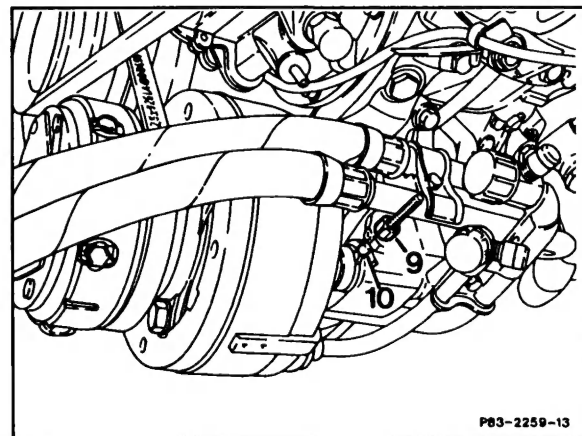


## V-belt B Air conditioning compressor

- Loosen bolts (6, 7 and 8).

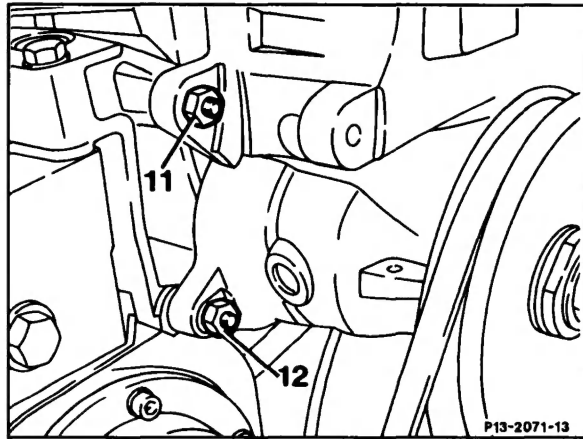


- Adjust V-belt with nut (9) of tensioning bolt (10).
- Tighten bolts (6, 7 and 8).



**V-belt C Power steering pump**

- Loosen nuts (11, 12 and 13).



- Adjust V-belt with clamping bolt (14).
- Tighten nuts (11, 12 and 13).

